

Functional Programming with Scala

Project Title: Functional Programming Project

Group Name: Group 4

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About the Project

- **Our Specific Contribution:**

- Together, we collaborated on:
 - Setting up MongoDB and loading the data.
 - Implementing Spark queries to process the data.
- Nouhaila: MongoDB
- Felipe: Neo4j

- **Methodology or Approach:**

- Step 1: Load JSON data from NIST for 2023 and 2024.
- Step 2: Filter data.
- Step 3: Load data into MongoDB.
- Step 4: Read data from MongoDB.
- Step 5: Load data into Neo4j.
- Step 6: Read data from Neo4j.

- **Challenges Faced and Their Resolutions:** Encountered challenges during the project setup:
 - Databricks: Missing required dependencies.
 - Felipe: Initially used an incorrect Java version.
 - Nouhailla: Insufficient RAM to process the data. These issues prevented us from completing the project.
- **Learning Gained:** Gained hands-on experience with Apache Spark, MongoDB and Neo4j.
- **Future Improvements:** Execute Cypher queries in Neo4j to extract meaningful insights.